



The Daedalean

Semper Discens

*Monthly Aerospace Education Newsletter of the Connecticut
Wing of the Civil Air Patrol*

*Stephen M. Rocketto, Capt., CAP
Director of Aerospace Education
CTWG
srocketto@aquilasys.com*

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CALENDAR

JUNE

13 JUN-Stratford Eagles Open House
20 JUN-CTWG Rocket Competition
23-27 JUN-AEO School-Pensacola, FL
27-28 JUN-RING Airshow-Quonset, RI
30 JUN-**DEADLINE** AFA Grant Program

For Future Planning

20 JUN-Rocketry Contest
4-11 JUL-CTWG Cadet Encampment
10-18 JUL-NER Staff College, McGuire AGB, NJ
18 JUL-Bradley Space and Aviation Day
19-30 JUL-NER Cadet Academy, Otis ANGB
5-7 AUG-AEO School-Wright Patterson AFB, OH
16-17 OCT-CTWG Conference and Cadet Ball

AFA GRANTS

The Air Force Association offers \$250 grants to CAP units twice annually. The next closing date is 30 June. Several CTWG Squadrons have taken advantage of this opportunity for funding. The procedure is simple. Contact the CTWG DAE, Capt Rocketto, for assistance. Obtain information at: http://www.afa.org/aef/aid/cap_ed.asp.

AEO SCHOOLS/NER STAFF COLLEGE

Two schools for AEOs have been scheduled. The first is at Pensacola, FL from 22 to 27 June. The second is a Wright-Patterson AFB, OH from 5-7 August. The CTWG DAE is interested in forming a party to attend the Ohio session.

The NER Staff College is scheduled for McGuire AFB, NJ, 10-18 July. Would any Wing Officers be interested in sharing transport to this event?

If any CTWG Officer is interested in participating in any of these activities, please contact Steve Rocketto at srocketto@aquilasys.com.

ROYALS RUN STARBASE ACTIVITY

STARBASE is a CT National Guard educational outreach program designed to "raise interest and improve knowledge and skills of at risk middle school youth in math, science, and aerospace technology.

On April 1st, Lt Abbate of the Royal Charter Composite Squadron conducted an educational program at Brainard Field for a group of these students. Lt Abbate opened a CAP Cessna 182 and allowed its inspection by the participants. He discussed ramp safety, the fundamentals of aircraft operations, and demonstrated aircraft control in all three axes and answered questions about the instrument panel and communications equipment.

CAPTAIN AL HAYNES LECTURES

On May 21st, retired United Airlines pilot Captain Al Haynes recounted the extraordinary tale of the catastrophic engine disintegration and impairment

of control of the Douglas DC-10 which he was flying on July 19, 1989 in a presentation at the Windsor Marriott. Capts Dammers of the 103rd and Capt Rocketto of Thames River and C/A1C E. Poesnecker of the Royal Cadet Composite Squadron were in attendance.

When blade separation destroyed the number 2 engine and ripped the accessory case apart, one of the three redundant hydraulic lines which supply pressure to the rudder and elevators was destroyed. Shrapnel from the destroyed unit then cut both of the other hydraulic lines causing rapid loss of fluid and a total loss of hydraulic boost. According the statisticians, the probability of this occurring was about one in a billion. Capt Haynes and his crew, assisted by a United Check Pilot who specialized in DC-10s and who manipulated the throttles, managed to maintain a modicum of control of the aircraft using differential thrust on the number one and two engines and executed an emergency landing at Sioux City, Iowa.



Douglas DC-10

Captain Haynes discussed the five factors which contributed to their ability to manage the crisis: luck, coordination, preparation, execution, and cooperation.

Luck played a key role. The incident occurred in clear weather during the day over the benign topography of the Great Plains. The failure which occurred was not covered by any check list procedure so the execution of the necessary tasks depended upon clear communications and smooth

coordination, the daughters of past preparation and practice. Finally, crew, passengers, air traffic control, emergency services, and the citizens of the Sioux City area all demonstrated clear thinking and appropriate actions as they cooperated both during the critical phase of the flight and after the crash landing.

Capt Haynes and a large number of professionals and volunteers exhibited the highest standards of human conduct in minimizing the death toll and then providing relief to those who survived.

2009 WING ROCKET CONTEST **NEW SITE ANNOUNCED**

The Commander's Cup Trophy for excellence in rocketry is up for grabs again. Our annual Wing meet will take place on 20 June at the Gadbois Farm launch site in Salem, CT under the guidance of CATO, the Connecticut association of rocket enthusiasts. For directions to the launch site, go to <http://www.catorockets.org/>.

These are the "Rules of Engagement" for the 2009 contest.

1. Novices who have not competed in a previous contest will construct an Estes Alpha (balsa fins). The rocket will be decorated with a Squadron theme design. Modifications: A Quest Astra 1 may be substituted for the Alpha. If no novices from the Squadron are entering the contest, this entry may be constructed by an advanced Cadet.

2. Squadrons will enter a kit built or scratch built rocket which replicates a historical rocket vehicle. The entry will include a 300-500 word essay, typed and double spaced on why the rocket is historically important.

3. A scratch built rocket will be constructed based upon the theme, "Comic, Fictional, or Mythological Characters." These characters might include but are not limited to characters such as Daedalus and Icarus, the Simpsons, Superman, Pegasus, Mighty Mouse, Snoopy, or some other figure from newspapers, books, cinema, or TV.

Engine size for any entry is limited to B size engines but may be smaller.

If possible, we would like to expand the number of rockets submitted by each Squadron for judging but this may depend upon the participation and time available.

However, bring as many rockets as possible and we will launch them if time permits. In the past, some Squadrons stayed for several hours extra and continued to launch rockets.

The planned potluck picnic has been cancelled by CATO.

Rocket Contest Judging Criteria

I. CATEGORY 1-NOVICE

Rockets will be either Estes Alphas (balsa fins) or Quest Astras

Points (12)

1. construction: fins rounded leading edges and tips, precise fin placement and gluing
2. painting: evenness of paint and sharp edges at color demarcations, decoration quality
3. decorations: appropriate squadron theme
4. flight: vertical ascent, parachute deployment, recovery

II. CATEGORY II-HISTORICAL ROCKET

These may be kit or scratch built

Points (15)

1. construction: fins rounded leading edges and tips, precise fin placement and gluing
2. painting: evenness of paint and sharp edges at color demarcations, decoration quality
3. decorations: appropriate squadron theme
4. flight: vertical ascent, parachute deployment, recovery
5. essay: neatness, spelling and grammar, historically accurate content

III. CATEGORY III-SCRATCH BUILT (15)

Points (15)

1. construction: fins rounded leading edges and tips, precise fin placement and gluing
2. painting: evenness of paint and sharp edges at color demarcations, decoration quality
3. decorations: appropriate squadron theme
4. flight: vertical ascent, parachute deployment, recovery
5. novelty: theme selection

Each point sub-section will be evaluated on a scale of 0 to 3. The total points will be added for each category and then the three categories will be added together to determine the Squadron score.

0 poor

1 satisfactory

2 above average

3 outstanding

RIFLE TOURNAMENT RESULTS

The CTWG Rifle Tournament was held on 9 May at the Quaker Hill Rod and Gun Club. Three Squadrons and 14 competitors competed. Due to inclement weather, the match was fired on the indoor 50 ft range rather than over the outdoor 50 yard distance however, the course of fire remained at 20 shots per competitor.

Each Squadron was supported by an Officer contingent. Lt Co Peter Sanderson served as Range Officer and Mark Wujtwicz and Carl Bilton of the Quaker Hill Club served as coaches.

The Thames River Composite Squadron, based at the Groton Airport, placed first with a score of 538 narrowly defeating the Meriden Silver City Cadet Squadron which carded 526 points. Hartford's Royal Charter Composite Squadron placed third with a 497.

Thames River Cadet Airman First Class Timothy Plourde was high gun with a score of 196. Plourde is a Montville High School senior National Honor Society member, and Captain of their rifle team. He will attend the University of Connecticut next year with a US Air Force ROTC scholarship.

Cadet Chief Master Sergeant George Planeta of the Silver City Squadron earned second place honors with a 195. Planeta attends Portland High School where he is a National Honor Society member and an outstanding wrestler. He, too, is a member of the Quaker Hill Junior Rifle Club, and will enroll as a Midshipman at the US Naval Academy in June.

Both Cadet Plourde and Cadet Planeta have earned the coveted NRA Distinguished Rifleman's Badge, which is the highest level of achievement in the junior program.

Cadet Airman First Class Andrew Molinari of Uncasville, another Groton member won Class A honors with a 186. Cadet Senior Master Sergeant

J. Blythe of Silver City was first in Class B firing a 162. Groton Cadet Senior Master Sergeant George Abbiati carded a 149 to take first in Class C.

The Cadets trained over the past year supported by funding from the Connecticut Friends of the NRA and gun clubs around the state. Over 100 Cadets participated and 77 earned NRA marksmanship medals which may be worn on their uniforms.

The tournament brings to a close the first year of CTWG Cadet rifle competition which has been funded by a grant from the Connecticut Friends of the NRA.



Tournament Participants from the Royals, Silver City, and Thames River Stand Ready.

MEMORIES OF JUNES PAST

01 June, 1919 - The U.S. Aerial Forest Patrol is established to search for forest fires.

02 June, 1954 - Capitol Airlines purchases three Vickers Viscount turboprop airliners marking the first time that a U.S. airline purchased British aircraft.



Capitol Viscount on the Ramp

03 June, 1948 - The *Chel Ha'avir* (Israeli Air Force) makes its first kills when Modi Alon, flying an S-199 *Messer*, a Czech version of the Me-109, downs two Egyptian C-47s.

04 June, 1942 - The Grumman TBM Avenger makes its combat debut at the Battle of Midway.



The Avenger was Flown by Ensign George H.W. Bush in World War II.

05 June, 1929 - Herr Prof. Hermann Oberth is awarded the Esnault-Pelterie-Hirsch International Aeronautical Prize for his book, *Wege sur Raumschiffahrt* (*The Way of Space Travel*).

06 June, 1936 - Socony-Vacuum Oil Company of New Jersey uses the revolutionary catalytic cracking process to produce 100 octane aviation gasoline.

07 June, 1936 - US Army Air Corps Maj. Ira C. Eaker flies a Boeing P-12 from New York to Los Angeles completing the first transcontinental blind flight.



P-12E Diorama

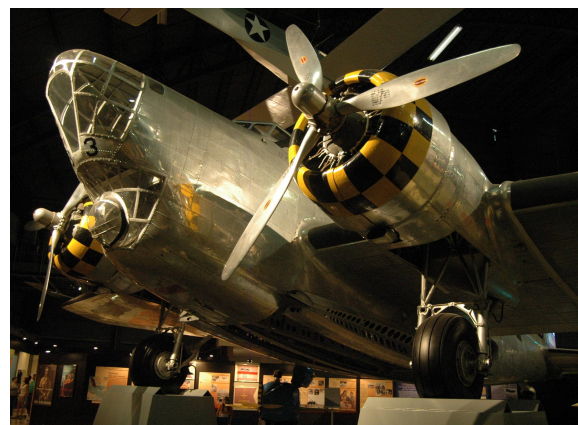
08 June, 1947 - American Airlines commences New York to Los Angeles passenger service with an intermediate stop in Chicago. Utilizing the Douglas DC-6, the flight takes ten hours.



Air Transport Command C-54 Skymaster, the Military Version of the Douglas DC-6 on the ramp at the Dover AFB Air Mobility Command Museum.

09 June, 1927 - President Calvin Coolidge issues the first executive order restricting airspace when aircraft are forbidden to fly over Washington, DC during the celebration of Charles Lindbergh's return from Paris after his solo North Atlantic crossing.

10 June, 1942 - The US Navy utilizes a blimp and a Douglas B-18 in Project Sail, the development of the first magnetic anomaly detection system.



Douglas Bolo, a DC-3 Derivative and Pioneer MAD and RADAR Platform and Sub Hunter in the Early Days of World War II.

11 June, 1937 - Reginald Mitchell, Chief Designer

of Supermarine, responsible for the Schneider Cup seaplanes and the graceful Spitfire, goes West.

12 June, 1925 - Daniel Guggenheim donates \$500,000 to New York University to fund a School of Aeronautics, the first of his philanthropic grants to promote aviation.

13 June, 1944 - The first operational V-1 cruise missile is launched from France against England.

14 June, 1919 - John Alcock and Arthur Brown pilot a Vickers Vimy from Newfoundland to Ireland, marking the first non-stop crossing of the Atlantic Ocean by aircraft.



The Smith Brothers Vimy on Display at Adelaide Airport, South Australia.



Carefully Examine This Commemorative Postal Cover Which Celebrates the 60th Anniversary of the Alcock-Brown Flight

15 June, 1921 - Bessie Coleman receives her Federation Aeronautique license and becomes the

first black woman aviator.

16 June, 1930 - Elmer Sperry, inventor of the gyrocompass and aircraft stabilization systems goes West.

17 June, 1951 - The US Navy issues a contract to Convair for the XF2Y-1 Sea Dart, a delta wing, jet powered, hydroski fighter prototype.



Pylon Mounted Sea Dart at San Diego Air Museum.

18 June, 1952 - NACA's H. Julian Allen publicly announces the "blunt body" reentry vehicle shape which uses a detached shock wave to retard heat transfer from the atmosphere to the vehicle.

19 June, 1894 - The extraordinary engineer, Frederick W. Lanchester, publishes the "theory of circulating air flow" which after Ludwig Prandtl's mathematical confirmation, becomes the chief tool for airfoil design.

20 June, 1937 - Pilot Valerie Chkalov, Navigator Alexandr Belyakov and Flight Engineer Georgi Baidukov fly a Sukhoi designed, Tupolev constructed ANT-25 from Moscow to Vancouver, Washington, the first flight from Europe to North America over the North Pole.

- Great Britain and Australia agree to establish a joint rocket testing facility at Woomera, South Australia.



Woomera Town Square

21 June, 1969 - Neil Armstrong and Buzz Aldrin depart the moon in the lunar module *Eagle*.

22 June, 1954 - First flight of the Ed Heinemann designed Douglas XA4D Skyhawk.



Tiny, agile Skyhawk also bore sobriquets of "Tinker Toy" and Heinemann's Hot Rod."

23 June, 1916 - Victor E. Chapman, flying a Nieuport 16 for the *Lafayette Escadrille*, is shot down over Verdun becoming the first American aviator killed in World War One.

24 June, 1934 - Famed racer and aviation record setter, James R. Weddell goes West in a crash of a DeHavilland DH-60G Gypsy Moth at Patterson, Louisiana.

25 June, 1923 - The first complete midair refueling using a pipeline is completed over San Diego. US Army Air Corps Lts Lowell Smith and John Richter fly a Boeing remanufactured, DeHavilland designed, DH-4B. and receive fuel from another aircraft flown by Lt Frank Seifert.

26 June, 1942 - First Flight of the Grumman F6F Hellcat prototype.



Hellcat Demonstrates Leroy Grumman's Unique Wing Folding Method.

27 June, 1945 - The Pilotless Aircraft Research Station is established at Wallops Island, Virginia.



Wallops Launch and Tracking Facilities

28 June, 1939 - North Atlantic passenger service commences when a Pan American Boeing 314 flying boat, *Dixie Clipper*, lift off from Port Washington, N.Y under the command of Capt. R.O.D. Sullivan. The journey culminates in Marseilles on July 2nd.

29 June, 1962 - First Flight of the British Aerospace VC-10 under the command of test pilot G. R. Bryce.



BOAC VC-10

30 June, 1927 - Phoebe Fairgrave Omlie becomes the first woman to receive a pilot's license from the Aeronautics Board of the US Department of Commerce when she is issues Transport License #199.

The Coastwatcher thanks Lt Col Stidsen for assistance in researching information about the Weddell accident, the Eaker flight, and Capt. Sullivan.